



# "UNFIED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/685,200		10/10/2000	John W. McCorkle	1541.1001/GMG	6026		
23400	7590	05/19/2004		EXAM	EXAMINER		
POSZ & B		•	LIU, SHUWANG				
11250 ROG	ER BAC	ON DRIVE		[	D 4 DED 140 40 DD		
SUITE 10			ART UNIT	PAPER NUMBER			
RESTON, Y	VA 2019	0	2634	Ì			
				DATE MAIL ED: 05/19/200	DATE MAILED: 05/19/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		A It At At							
		Application No.		pplicant(s)					
		09/685,200		MCCORKLE, JOHN W.					
•	Office Action Summary	Examiner		Art Unit					
		Shuwang Liu		2634					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)⊠	Responsive to communication(s) filed on 10 O	october 2000.							
2a) <u></u>	This action is <b>FINAL</b> . 2b) This	action is non-f	inal.						
3)⊠	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
5)□ 6)□ 7)⊠	Claim(s) 1-26 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) is/are rejected.  Claim(s) 1-26 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.								
Applicati	ion Papers								
9)⊠ The specification is objected to by the Examiner.									
10)⊠	The drawing(s) filed on is/are: a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  1) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	under 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
Attachmen	• •	•	7						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) L							
3) 🔀 Inforr	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>5. 6.</u>	5) [ 6) [	Notice of Informal Pa		)-152)				

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#### **DETAILED ACTION**

#### **Drawings**

- 1. New corrected drawings are required in this application because of informal drawings. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.
- 2. Figures 1A, 1B, 2, 3, 4A, 4B and 5A-5C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### Specification

3. The disclosure is objected to because of the following informalities:

The examiner suggests updating status of the cited applications, for example, page 1, line 11, 09/563,292 should be US Patent 6,351,246, and filing the correct application number instead of XX/XXX,XXX in the specification if appropriate.

Appropriate correction is required.

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# Claim Objections

4. Claims 1-26 are objected to because of the following informalities:

T<sub>S</sub>" should be defined in claims.

Appropriate correction is required.

## Allowable Subject Matter

- 5. Claims 1-26 would be allowable if rewritten to overcome the objections, set forth in this Office action.
- 6. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach and suggest an apparatus comprising removing DC components from the mixed signal, outputting a resultant signal wherein an initial peak of the resultant signal is proportional to energy included in the mixed ultra wide bandwidth signal and post signal decay of the resultant signal to zero occurs in T<sub>S</sub> time.

#### Conclusion

7. This application is in condition for allowance except for the following formal matters:

The objection as described above.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

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A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Shuwang Liu Primary Examiner

Slowary Tim

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May 11, 2004